

EPODOC / EPO

PN - JP11110319 A 19990423  
PD - 1999-04-23  
PR - JP19970275847 19971008  
OPD - 1997-10-08  
TI - TRANSMITTER, RECEIVER, RECORDING DEVICE AND REPRODUCING  
DEVICE  
IN - WATANABE KOICHIRO  
PA - SONY CORP  
IC - G06F13/00 ; H04L12/54 ; H04L12/58  
WPI / DERWENT

TI - Acoustic uniform resource locator signal transmitter for  
personal computer, television with internet accessing facility -  
modulates acoustic signal supplied by superposition device and  
transmits it through antenna

PR - JP19970275847 19971008  
PN - US6163803 A 20001219 DW200102 G06F15/16 000pp  
- JP11110319 A 19990423 DW199927 G06F13/00 024pp  
PA - (SONY ) SONY CORP  
IC - G06F13/00 ;G06F15/16 ;H04L12/54 ;H04L12/58  
IN - WATANABE K  
AB - J11110319 NOVELTY - An encoder (102) outputs URL signal  
based on URL supplied from URL input unit (101) to acoustic  
signal superposition device (103). Acoustic signal transmitter  
(104) performs the modulation of acoustic signal supplied by  
superposition device and transmits it through antenna (105).  
DETAILED DESCRIPTION - An INDEPENDENT CLAIM is also included for  
acoustic URL signal recording and reproducing device.

- USE - For home personal computer, TV with internet accessing  
function.

- ADVANTAGE - Acoustic URL signal simplifies access to web site.  
DESCRIPTION OF DRAWING(S) - The figure shows the functional  
diagram of acoustic URL signal transmitter. (101) URL input unit;  
(102) Encoder; (103) Acoustic signal superposition device; (104)  
Acoustic signal transmitter; (105) Antenna.

- (Dwg.1/17)  
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OPD - 1997-10-08  
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PAJ / JPO

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AP - JP19970275847 19971008  
IN - WATANABE KOICHIRO  
PA - SONY CORP  
TI - TRANSMITTER, RECEIVER, RECORDING DEVICE AND REPRODUCING  
DEVICE  
AB - PROBLEM TO BE SOLVED: To easily access a web site that is

shown by a URL(uniform resource locator) which is broadcasted by television broadcasting.

- SOLUTION: A URL inputting part 101 supplies a URL to be transmitted to an encoder 102. A keyboard is mentioned as a typical URL inputting part. The encoder 102 supplies an encoded acoustic URL signal to an acoustic superimposing device 103 based on the URL form the part 101. The device 103 superimposes the acoustic URL signal supplied from the encoder 102 upon an acoustic signal that is supplied from an input terminal and supplies it to an acoustic signal transmitter 104. The transmitter 104 transmits through a transmitting antenna 105. Also, it temporally switches the acoustic URL signal and the acoustic signal from the input terminal along a rule that is preliminarily defined and transmits either of them.

I - G06F13/00 ;H04L12/54 ;H04L12/58

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2. \*\*\*\* shows the word which can not be translated.
3. In the drawings, any words are not translated.

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**DETAILED DESCRIPTION**

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[Detailed description]

[0001]

[Field of the Invention] This invention relates to the sound URL signal sending set through an acoustic signal, a sound URL signal receiving set, a television sending set, a television receiving set, a sound URL signal recording device, sound URL signal regeneration equipment, an optical disk recording device, and an optical disk regenerative apparatus.

[0002]

[Prior art] When the website which URL (Uniform Resource Locator) broadcast by television broadcasting shows was accessed conventionally, the televiewer once needed to write down the URL and needed to input it into the information processor with a web browser function like a home personal computer or internet TV.

[0003] Or when the website which URL which exists in the video signal reproduced from package medias, such as an optical disk, shows was accessed conventionally, the televiewer once needed to write down the URL and needed to input it into the information processor with a web browser function like a home personal computer or internet TV.

[0004]

[The technical problem which invention is going to solve] However, these technique was very inconvenient.

[0005] In order that the purpose of this invention may make the access to a website easy in view of such a point, when URL is extracted from the sound URL signal sending set and television sending set which transmit URL as an acoustic signal, and the received acoustic signal, an automatic access is carried out at the website which the URL shows, a web information is acquired, and it is in proposing the sound URL signal transceiver system which consists of the sound URL signal receiving set and television receiving set which output the web information.

[0006] Furthermore, other purposes of this invention are to propose the sound URL signal record regeneration system which consists of the sound URL signal-regeneration equipment and the optical disk regenerative apparatus which carry out an automatic access at the sound URL signal recording device and the optical disk recording device which record URL as an acoustic signal, and the website which the URL shows when URL is extracted from the reproduced acoustic signal, acquire a web information, and output the web information in order to make the access to a website easy.

[0007]

[The means for solving a technical problem] A URL input means to determine URL which should transmit invention of a publication to a claim 1, The encoder which outputs a sound URL signal on the basis of URL supplied from URL input means, An acoustic signal change means to change the sound URL signal supplied from an encoder, and the acoustic signal supplied from the exterior, and to output those either, It is the sound URL signal sending set characterized by having an acoustic signal transmitting means to modulate the acoustic signal which an acoustic signal change means supplies, and the transmitting aerial which supplies the modulated acoustic signal.

[0008] A URL input means to determine URL which should transmit invention of a publication to a claim 2, The encoder which outputs a sound URL signal on the basis of URL supplied from URL input means, An acoustic signal superposition means to superimpose on the acoustic signal to which the sound URL signal supplied from an encoder is supplied from the exterior, and to output, It is the

sound URL signal sending set characterized by having an acoustic signal transmitting means to modulate the acoustic signal which an acoustic signal superposition means supplies, and the transmitting aerial which supplies the modulated acoustic signal.

[0009] An acoustic signal receiving means to recover an acoustic signal from the signal supplied to a claim 3 from the receiving aerial with which invention of a publication receives a Hertzian wave, and receiving aerial, An acoustic signal output means to output the acoustic signal supplied from an acoustic signal receiving means, The decoder which extracts a sound URL signal and determines URL transmitted from the extracted sound URL signal as a meaning from the acoustic signal supplied from an acoustic signal receiving means, An information-processing means to access the website which URL supplied from a decoder shows through a network circuit, and to output a web information, or to output and input URL among the predetermined storage section, A storage means to memorize the information supplied from an information-processing means by the instruction from an instruction input means to give an instruction to an information-processing means, and an information-processing means, or to read the information memorized, and to supply an information-processing means, It is the sound URL signal receiving set characterized by having a web information output means to output the web information supplied from an information-processing means.

[0010] The keyboard which inputs URL which should transmit invention of a publication to a claim 5, The encoder which outputs a sound URL signal on the basis of URL inputted from the keyboard, An acoustic signal superposition means to superimpose on the acoustic signal to which the sound URL signal supplied from an encoder is supplied from the exterior, and to output, It is the television sending set which has the sound URL signal transmitting function characterized by having an acoustic-imaging signal transmitting means to modulate the video signal supplied from the acoustic signal which an acoustic signal superposition means supplies, and the exterior, and the transmitting aerial which supplies the acoustic signal and video signal which were modulated.

[0011] An acoustic-imaging signal receiving means to recover an acoustic signal and a video signal from the signal supplied to a claim 6 from the receiving aerial with which invention of a publication receives a Hertzian wave, and receiving aerial, The loudspeaker which outputs the acoustic signal supplied from an acoustic-imaging signal receiving means, The decoder which extracts a sound URL signal and determines URL transmitted from the extracted sound URL signal as a meaning from the acoustic signal supplied from a video-signal output means and an acoustic-imaging signal receiving means, An information-processing means to access the website which URL supplied from a decoder shows through the telephone line, and to output a web information, or to output and input URL among the predetermined storage section, A storage means to memorize the operation key which gives an instruction to an information-processing means, and the information supplied from an information-processing means by the instruction from an information-processing means, or to read the information memorized, and to supply an information-processing means, A web information video-signal conversion means to change the web information supplied from an information-processing means into the video signal in which an output is possible for a video-signal output means, A video-signal change means to supply one side or the both sides of the video signal supplied from a web information video-signal conversion means, and the video signal supplied from an acoustic-imaging signal receiver to a video-signal output means, It is the television receiving set which has the sound URL signal reception function characterized by having the monitor which outputs the video signal supplied from a video-signal change means.

[0012] Invention given in a claim 17 is the sound URL signal recording device characterized by to have the encoder which outputs a sound URL signal, an acoustic signal superposition means superimpose and output the sound URL signal supplied from an encoder to the acoustic signal supplied from the exterior, and an acoustic signal record means record the acoustic signal which an acoustic signal superposition means supplies to an acoustic signal record medium, on the basis of the URL supplied from a URL input means determine URL which should be transmitted, and a URL input means.

[0013] An acoustic signal regeneration means to reproduce the acoustic signal with which invention given in a claim 18 is recorded by the acoustic signal record medium by the instruction from an information-processing means, An acoustic signal output means to output the acoustic signal

supplied from an acoustic signal regeneration means, The decoder which extracts a sound URL signal and determines URL transmitted from the extracted sound URL signal as a meaning from the acoustic signal supplied from an acoustic signal regeneration means, An information-processing means to output and input URL among the predetermined storage section, or to give control instruction to an acoustic signal regenerator or it accesses the website which URL supplied from a decoder shows through a network circuit and it outputs a web information, A storage means to memorize the information supplied from an information-processing means by the instruction from an instruction input means to give an instruction to an information-processing means, and an information-processing means, or to read the information memorized, and to supply an information-processing means, It is the sound URL signal regeneration equipment characterized by having a web information output means to output the web information supplied from an information-processing means.

[0014] The keyboard which inputs URL which should transmit invention of a publication to a claim 20, The encoder which outputs URL acoustic signal on the basis of URL inputted from the keyboard, An acoustic signal superposition means to superimpose and output URL acoustic signal supplied from an encoder to the acoustic signal supplied from the exterior, It is the optical disk recording device which has the sound URL signal record function characterized by having an optical disk record means to record the video signal supplied from the acoustic signal which an acoustic signal superposition means supplies, and the exterior to an optical disk.

[0015] An optical disk regeneration means by which invention given in a claim 21 reproduces an acoustic signal and a video signal from an optical disk, The loudspeaker which outputs the acoustic signal supplied from an optical disk regeneration means, The decoder which extracts a sound URL signal and determines URL transmitted from the extracted sound URL signal as a meaning from the acoustic signal supplied from a video-signal output means and an optical disk regeneration means, An information-processing means to output and input URL among the predetermined storage section, or to give control instruction to an optical disk regenerator or it accesses the website which URL supplied from a decoder shows through the telephone line and it outputs a web information, A storage means to memorize the operation key which gives an instruction to an information-processing means, and the information supplied from an information-processing means by the instruction from an information-processing means, or to read the information memorized, and to supply an information-processing means, The video signal supplied from the web information video-signal conversion means and the web information video-signal conversion means of changing the web information supplied from an information-processing means into the video signal in which an output is possible for a video-signal output means, A video-signal change means to supply one side or the both sides with the video signal supplied from an acoustic-imaging signal regeneration means to a video-signal output means, It is the optical disk regenerative apparatus which has the sound URL signal regeneration function characterized by having the monitor which outputs the video signal supplied from a video-signal change means.

[0016] URL is made to superimpose on an acoustic signal and it transmits from transmitting aerial as a sound URL signal. At this time, you may be made to transmit a sound URL signal with a video signal. If the transmitted sound URL signal is received, it is asked by the information-processing section, and URL uniquely determined from the sound URL signal will acquire the web information shown by the URL through a network circuit, and will display the acquired web information. Or when URL calculated by the information-processing section is memorized to the storage section and a display instruction is inputted, it gains through a network circuit and the acquired web information is displayed. When a sound URL signal is received with a video signal at this time, it changes from a video signal to the monitor with which the video signal is displayed to a web information, or a web information is displayed on a monitor with a video signal. Furthermore, when the record medium with which a sound URL signal is recorded to a record medium, and the sound URL signal was recorded is reproduced, the web information similarly shown by calculated URL is acquired through a network circuit, and the acquired web information is displayed. Or when calculated URL is memorized to the storage section and a display instruction is inputted, it gains through a network circuit and the acquired web information is displayed.

[0017]

[Gestalt of implementation of invention] Hereafter, the enforcement gestalt of this invention is explained. The sound URL signal transceiver system concerning this invention consists of a sound URL sending set and a sound URL receiving set. A sound URL sending set changes a URL input means to determine URL which should be transmitted, the encoder which outputs URL acoustic signal on the basis of URL supplied, and URL acoustic signal and the acoustic signal which are supplied, and has the acoustic signal switcher which outputs those either, the acoustic signal transmitter which modulates the acoustic signal supplied, and transmitting aerial.

[0018] Or a sound URL sending set has a URL input means to determine URL which should be transmitted, the encoder which outputs URL acoustic signal on the basis of URL supplied, the acoustic signal superposition machine which superimposes and outputs URL acoustic signal supplied to the acoustic signal supplied from the exterior, the acoustic signal transmitter which modulates the acoustic signal supplied, and transmitting aerial.

[0019] The acoustic signal receiver with which a sound URL receiving set recovers an acoustic signal from the signal with which it is supplied from the receiving aerial which receives a Hertzian wave, and receiving aerial, An acoustic signal output means to output the acoustic signal supplied, and the decoder which extracts a sound URL signal from the acoustic signal supplied, and determines transmitted URL as a meaning, The information processor which accesses the website which URL supplied shows through a network circuit, and acquires a web information, or outputs and inputs URL to storage, By web information output means to output the web information supplied, and the instruction from an information processor It has an instruction input means to give an instruction to the storage which writes in the information supplied from an information processor, or reads the memorized information, and is supplied to an information processor, and an information processor.

[0020] Furthermore, the sound URL signal record regeneration system concerning this invention consists of a sound URL recording device and a sound URL regenerative apparatus. A sound URL recording device has a URL input means to determine URL which should be transmitted, the encoder which outputs URL acoustic signal on the basis of URL supplied, the acoustic signal superposition machine which superimposes and outputs URL acoustic signal supplied to the acoustic signal supplied from the exterior, and the acoustic signal recorder which records the acoustic signal supplied to an acoustic signal record medium.

[0021] The acoustic signal regenerator to which a sound URL regenerative apparatus reproduces the acoustic signal currently recorded by the acoustic signal record medium by the instruction from an information processor, An acoustic signal output means to output the acoustic signal supplied, and the decoder which extracts a sound URL signal from the acoustic signal supplied, and determines transmitted URL as a meaning, The information processor which outputs and inputs URL to storage, or gives an instruction to an acoustic signal regenerator or it accesses the website which URL supplied shows through a network circuit and it acquires a web information, By web information output means to output the web information supplied, and the instruction from an information processor It has an instruction input means to give an instruction to the storage which writes in the information supplied from an information processor, or reads the memorized information, and is supplied to an information processor, and an information processor.

[0022] Next, the suitable enforcement gestalt of the equipment applied to this invention is explained in detail, referring to a drawing. On these specifications, an acoustic signal [ the signal of human being's audible band ] is written. Moreover, it writes a sound URL signal [ the characteristic acoustic signal corresponding to URL and the couple 1 ] under the rule defined beforehand.

[0023] On these specifications, it connects with internet and a website [ an information server ] is written, a website supplies a client and a client writes a web information [ the information with which an user can be provided ] through a browser. As an example of a web information, the text information written by format of HTML (Hyper Text Markup Language) etc., image information, etc. are mentioned.

[0024] Next, the sound URL transceiver system concerning this invention is explained in detail, referring to a drawing. Drawing 1 is the 1st enforcement gestalt of the sound URL signal sending set which applied this invention. URL input section 101 supplies URL which should be transmitted to an encoder 102. A keyboard is mentioned as typical URL input section. An encoder 102 supplies the

encoded sound URL signal to the acoustic signal superposition machine 103 on the basis of URL from URL input section 101. The sound URL signal supplied from the encoder 102 is superimposed on the acoustic signal supplied from an input terminal, and the acoustic signal superposition machine 103 supplies it to the acoustic signal transmitter 104. The acoustic signal transmitter 104 is transmitted through the transmitting aerial 105.

[0025] If the separation extraction of a sound URL signal is more possible than the acoustic signal received though a change, any, or one side was transmitted in time in accordance with the rule which was able to lay down beforehand the sound URL signal and the acoustic signal from an input terminal, although the sound URL signal was superimposed on the acoustic signal from the input terminal in this sound URL signal sending set, it cannot be overemphasized that the same effect is acquired.

[0026] Drawing 2 is the 2nd enforcement gestalt of the sound URL signal sending set which applied this invention. URL input section 201 supplies URL which should be transmitted to an encoder 202. An encoder 202 supplies the encoded sound URL signal to the acoustic signal switcher 203 on the basis of URL from URL input section 201. The acoustic signal switcher 203 supplies a change, any, or one side to the acoustic signal transmitter 204 in time in accordance with the rule which was able to lay down beforehand the sound URL signal supplied from the encoder 202, and the acoustic signal supplied from an input terminal. The acoustic signal transmitter 204 is transmitted through the transmitting aerial 205.

[0027] If the technique of performing extremely the change which the acoustic signal switcher 203 performs for a short time, or changing according to the wave of the inputted acoustic signal is used, it is possible to also make for human being's ear to hear a voice URL signal intentionally.

[0028] Drawing 3 shows the block diagram of an example of the encoder in drawing 1 or drawing 2. URL supplied through an input terminal is supplied to a microcomputer (microcomputer) 301. A microcomputer 301 supplies the information (sound URL signal digitized and memorized) corresponding to supplied URL through a microcomputer 301 on the basis of supplied URL at D/A converter 303 with reference to URL and the sound URL signal correspondence table storage section 302. D/A converter 303 changes and outputs the information supplied from a microcomputer 301 to a sound URL signal.

[0029] By combining the means, the equipment, and procedure which were mentioned above, the sound URL signal sending set which transmits URL as a sound URL signal is realizable.

[0030] Drawing 4 is the 1st enforcement gestalt of the sound URL signal receiving set which applied this invention. The acoustic-imaging signal receiver 402 recovers an acoustic signal from the Hertzian wave which the receiving aerial 401 caught, and supplies the acoustic signal to which it restored to the decoder 403 and the acoustic signal output section 404. From the acoustic signal from the acoustic signal receiver 402, a decoder 403 is extracting the sound URL signal corresponding to URL and the couple 1, determines transmitted URL, and supplies the URL to the information-processing section 405.

[0031] The acoustic signal output section 404 outputs the acoustic signal supplied from the acoustic signal receiver 402. A loudspeaker is mentioned as a typical acoustic signal output means. The information-processing section 405 accesses the website which URL supplied from a decoder 403 shows through the network circuit 407 along with the procedure defined beforehand, acquires a web information, and supplies a web information to the web information output section 408 according to the instruction from the instruction input section 406.

[0032] Or if needed, the information-processing section 405 writes in the storage section 409 for URL, or reads URL from the storage section 409. A microcomputer is mentioned as typical information-processing section. The storage section 409 supplies URL which has memorized or memorized URL supplied from the information-processing section 405 to the information-processing section 405. The instruction input section 406 supplies an instruction to the information-processing section 405. A handler (an operating button, operation key) is mentioned as typical instruction input section. The web information output section 408 outputs the web information supplied from the information-processing section 405. As typical web information output section, the output terminal which outputs a web information by the monitor or the protocol defined beforehand is mentioned.

[0033] Drawing 5 shows the block diagram of an example of the decoder in drawing 4. From the

acoustic signal supplied from an input terminal, a band pass filter (BPF) 501 extracts only a required sound band, and supplies it to A/D converter 502. A/D converter 502 carries out digital conversion of the signal supplied, and supplies it to a microcomputer 503. On the basis of the information supplied from the A/D converter, with reference to URL and the sound URL signal correspondence table storage section 504, a microcomputer 503 is extracting the sound URL signal corresponding to URL and the couple 1, determines transmitted URL and outputs the URL through a microcomputer 503.

[0034] Drawing 6 shows the block diagram of an example of the information-processing section 405 in drawing 4. The system controller 602 is connected to CPU601 which performs a control, an operation, etc. of the whole information-processing section. In a system controller 602, CPU601, ROM603 and RAM604, and timing adjustment with other controllers are performed. The procedure of the whole information-processing section is memorized by ROM603, and it is referred by the designation from CPU601 or the system controller 602 at it. Writing or reading of an information is performed in RAM604 by the designation from CPU601 or the system controller 602.

[0035] The bus 605 for transmitting an information is connected to the system controller 602, and a display controller 606, the network-connection section 607, the alter operation key controller 608, or I/O controller 609 is connected through this bus 605. From a display controller 606, a web information is outputted based on the designation from CPU601.

[0036] In the network-connection section 607, based on the designation from CPU601, a transmission information is modulated according to the protocol defined beforehand, and it outputs to a network. Or in the network-connection section 607, when a signal is inputted according to the protocol defined beforehand, it restores to the signal and CPU601 is supplied. The telephone line is mentioned as a typical example of a network circuit. In that case, it is the network-connection section 607, i.e., the dialup section, and a transmission information will be modulated and outputted to the acoustic signal which can be transmitted by the telephone line based on the designation from CPU601. Or when an acoustic signal is inputted into the dialup section, it will restore to the signal and CPU601 will be supplied.

[0037] By the alter operation key controller 608, a keyboard, a handler (an operating button, operation key), etc. are connected, the operation signal according to those operations is generated, and CPU601 is supplied. In I/O controller 609, an information is outputted from an output terminal based on the designation from CPU601. Or in I/O controller 609, when an information is inputted from an input, the information is supplied to CPU601.

[0038] Next, with reference to the flow chart of drawing 7, processing which the procedure of this information-processing section, i.e., the sound URL signal receiving set by this invention, performs is explained. In step S701, when it is judged whether URL was inputted from the decoder and URL is inputted, a control moves to step S702, and when URL is not inputted, a control returns to step S701. That is, it has stopped at the control of step S701 until URL is inputted. In step S702, the website which inputted URL shows is accessed through a network circuit, a web information is acquired, and a control moves to step S703. In step S703, a web information is outputted and a control returns to step S701.

[0039] If such procedure is used, when a sound URL signal is extracted from the received acoustic signal, the sound URL signal receiving set by this invention will access immediately the website which the URL shows through the telephone line, and will output the web information acquired by it.

[0040] By combining the means, the equipment, and procedure which were mentioned above, URL is extracted from the received acoustic signal, and the sound URL signal receiving set which accesses the website which the URL shows can be realized.

[0041] If the sound URL signal sending set by this invention mentioned above and a sound URL signal receiving set are used, the sound URL signal transceiver system which makes the access to a website easy is realizable.

[0042] it can apply to every system by which the sound URL signal transceiver system by this invention can transmit and receive an acoustic signal -- obvious -- it is.

[0043] Next, the example which applied the sound URL signal transceiver system by this invention to television broadcasting is explained using suitable drawing. Drawing 8 is the modification which applied the sound URL signal sending set by this invention to the television sending set. The



keyboard 801 as URL input section supplies URL which should be transmitted to an encoder 802. An encoder 802 supplies a sound URL signal to the acoustic signal superposition machine 803 on the basis of URL from a keyboard 801. The acoustic signal superposition machine 803 is superimposed on the acoustic signal to which the sound URL signal supplied from the encoder 802 is supplied from an input terminal, and is supplied to the acoustic-imaging signal transmitter 804. The acoustic-imaging signal transmitter 804 transmits the acoustic signal with which it was superimposed on the sound URL signal through the transmitting aerial 805 with the video signal supplied from an input terminal.

[0044] As mentioned above, the television sending set which has a sound URL signal transmitting function by this invention by combining a means and equipment is realizable.

[0045] Drawing 9 is the modification which applied the sound URL signal receiving set by this invention to the television receiving set. Here, the web information is outputted using a web information video-signal converter and a monitor, and the monitor is shared with the monitor as video-signal output section. Moreover, although any circuit is sufficient as a network circuit as long as it is accessible, it explains the equipment to a website to access to a website through the telephone line here.

[0046] The acoustic-imaging signal receiver 902 recovers a video signal and an acoustic signal from the Hertzian wave which the receiving aerial 901 caught, supplies a video signal to the video-signal switcher 905, and supplies an acoustic signal to the loudspeaker 904 as the decoder 903 and acoustic signal output section. From the acoustic signal from the acoustic-imaging signal receiver 902, a decoder 903 is extracting the sound URL signal corresponding to URL and the couple 1, determines transmitted URL, and supplies the URL to the information-processing section 907. A loudspeaker 904 outputs the acoustic signal supplied from the acoustic-imaging signal receiver 902.

[0047] An information processor 907 accesses the website which URL supplied from a decoder 903 shows through the telephone line 909 along with the procedure defined beforehand, acquires a web information, and supplies a web information to the web information video-signal converter 910 according to the instruction from the operation key 908 as instruction input section. Or if needed, the information-processing section 907 writes in the storage section 911 for URL, or reads URL from storage 911.

[0048] The storage section 911 supplies URL which has memorized or memorized URL supplied from the information-processing section 907 to the information-processing section 907. The operation key 908 as instruction input section supplies an instruction to the information-processing section 907. The web information video-signal converter 910 changes into a video signal the web information supplied from an information processor 907, and supplies it to the video-signal switcher 905.

[0049] The video-signal switcher 905 supplies any, one side, or the both sides of a video signal supplied from the video signal or the web information video-signal converter 910 supplied from the acoustic-imaging signal receiver 902 to the monitor 906 as a video-signal output means. A monitor 906 outputs the video signal supplied from the video-signal switcher 905.

[0050] Next, with reference to the flow chart of drawing 10, the procedure of the information-processing section 907, i.e., the procedure of the television receiving set by this invention, is explained. In step S1001, when it is judged whether URL was inputted from the decoder and URL is inputted, a control moves to step S1002, and when URL is not inputted, a control returns to step S1001. That is, the control has stopped at step S1001 until URL is inputted.

[0051] In step S1002, the website which inputted URL shows is accessed through the telephone line, a web information is acquired, and a control moves to step S1003. In step S1003, a web information is displayed on a monitor and step S1004 moves. It is judged in step S1004 whether the instruction which terminates a display came. When a display end instruction comes, a control moves to step S705, and when not coming, a control returns to step S1004. That is, the control has stopped at step S1004 until a display end instruction comes. In step S1005, a display of a web information is ended and a control returns to step S1001.

[0052] If such procedure is used, the television receiving set by this invention can realize the function which displays on a monitor until an user gives a display end instruction for the web information which accessed immediately the website which the URL shows through the telephone

line, and was acquired when a sound URL signal is extracted from the received acoustic signal.

[0053] The television receiving set which has a sound URL signal reception function by this invention by combining the means, the equipment, and procedure which were mentioned above is realizable.

[0054] If the television receiving set which has the television sending set and sound URL signal reception function which were mentioned above to have a sound URL signal transmitting function by this invention is used, the sound URL signal transceiver system by this invention is applicable to television broadcasting.

[0055] although how to apply transmission and reception of a sound URL signal to a picture acoustic signal transceiver system, i.e., television broadcasting, was explained to the example until now, transmission and reception of a video signal are not indispensable to transmission and reception of a sound URL signal -- obvious -- it is .

[0056] Although the equipment which gave the sound URL signal reception function to the television set as a former and sound URL signal receiving set has been explained, it cannot be overemphasized that it can realize also as software which is applied to the personal computer having an acoustic signal reception function and the function which accesses to a website and displays a web information and which realizes procedure explained so far.

[0057] Next, the sound URL signal record regeneration system applied to this invention is explained in detail, referring to a drawing. Drawing 11 is the enforcement gestalt of the sound URL signal recording device which applied this invention. URL input section 1101 supplies URL which should be transmitted to an encoder 1102. A keyboard is mentioned as typical URL input section. An encoder 1102 supplies a sound URL signal to the acoustic signal superposition machine 1103 on the basis of URL from URL input section 1101. An encoder 1102 is the same as the encoder shown in drawing 3 mentioned above, and is good.

[0058] The sound URL signal supplied from the encoder 1102 is superimposed on the acoustic signal supplied from an input terminal, and the acoustic signal superposition machine 1103 supplies it to the acoustic signal recorder 1104. The acoustic signal recorder 1104 records the acoustic signal supplied from the acoustic signal superposition machine 1103 to the acoustic signal record medium 1105. As a typical acoustic signal record medium, a magnetic tape, an optical disk, a memory card, etc. are mentioned.

[0059] Thus, by combining a means, equipment, and procedure, the sound URL signal recording device which records URL as an acoustic signal is realizable.

[0060] At this sound URL signal recording device, it cannot be overemphasized that the same effect will be acquired from the acoustic signal reproduced though a change, any, or one side was recorded in time in accordance with the rule which was able to lay down beforehand the sound URL signal and the acoustic signal from an input terminal, although the sound URL signal was superimposed on the acoustic signal from the input terminal if the separation extraction of a sound URL signal is possible.

[0061] Moreover, if the technique of performing extremely the change which an acoustic signal switcher performs in that case for a short time, or changing according to the wave of the inputted acoustic signal is used, it is possible to also make for human being's ear to hear a voice URL signal intentionally.

[0062] Drawing 12 is the enforcement gestalt of the sound URL signal regeneration equipment which applied this invention. By the instruction from the information-processing section 1205, the acoustic signal regenerator 1202 reproduces an acoustic signal from the acoustic signal record medium 1201, and supplies it to the decoder 1203 and the acoustic signal output section 1204. A decoder 1202 is the same as that of the decoder shown in drawing 5 mentioned above, and is good. From the acoustic signal supplied from the acoustic signal regenerator 1202, a decoder 1203 is extracting the sound URL signal corresponding to URL and the couple 1, determines transmitted URL and supplies the URL to the information-processing section 1205. The acoustic signal output section 1204 outputs the acoustic signal supplied from the acoustic signal regenerator 1202. A loudspeaker is mentioned as typical acoustic signal output section.

[0063] The information-processing section 1205 accesses the website which URL supplied from a decoder 1203 shows through the network circuit 1207 along with the procedure defined beforehand,

acquires a web information, and supplies a web information to the web information output section 1208 according to the instruction from the instruction input section 1206. Or if needed, the information-processing section 1205 writes in the storage section 1209 for URL, or reads URL from the storage section 1209. Or the information-processing section 1205 gives an instruction to the acoustic signal regenerator 1202. A microcomputer is mentioned as typical information-processing section.

[0064] The storage section 1209 supplies URL which has memorized or memorized URL supplied from the information-processing section 1205 to the information-processing section 1205. The instruction input section 1208 supplies an instruction to the information-processing section 1205. A handler (an operating button, operation key) is mentioned as a typical instruction input means. The web information output section 1208 outputs the web information supplied from the information-processing section 1205. As typical web information output section, the output terminal which outputs a web information by the monitor or the protocol defined beforehand is mentioned.

[0065] The information-processing section 1205 is the same as that of the information-processing section shown in drawing 6 mentioned above, and is good. Moreover, processing which URL regenerative apparatus performs by the procedure of an information processor 1205, i.e., this invention, is the same as processing shown in drawing 7 mentioned above, and is good.

[0066] Thus, by combining a means, equipment, and procedure, URL is extracted from the reproduced acoustic signal and sound URL signal regeneration equipment which accesses the website which the URL shows can be realized.

[0067] If the sound URL signal recording device by this invention and sound URL signal regeneration equipment which were mentioned above are used, the sound URL signal record regeneration system which makes the access to a website easy is realizable.

[0068] if record regeneration of an acoustic signal is possible for the sound URL signal record regeneration system by this invention, it can apply to every system -- obvious -- it is . namely, even if it uses which acoustic signal record medium, this effect of the invention is the same -- obvious -- it is .

[0069] Next, the sound URL signal record regeneration system (an optical disk record regeneration system is called hereafter.) which used the optical disk as an acoustic signal record medium is explained as enforcement gestalt of the sound URL signal record regeneration system by this invention.

[0070] Drawing 13 is the enforcement gestalt which applied the sound URL signal recording device by this invention to the optical disk recording device. The keyboard 1301 as URL input section supplies URL which should be transmitted to an encoder 1302. An encoder 1302 supplies a sound URL signal to the acoustic signal superposition machine 1303 on the basis of URL from a keyboard 1301. The sound URL signal supplied from the encoder 1302 is superimposed on the acoustic signal supplied from an input terminal, and the acoustic signal superposition machine 1303 supplies it to the optical disk Records Department 1304. The optical disk Records Department 1304 records the acoustic signal supplied from the acoustic signal superposition machine 1303 to an optical disk 1305.

[0071] Thus, the optical disk recording device which has a sound URL signal record function by this invention by combining a means and equipment is realizable.

[0072] Drawing 14 is the enforcement gestalt which applied the sound URL signal regeneration equipment by this invention to the optical disk regenerative apparatus. Here, the web information is outputted using a web information video-signal converter and a monitor, and the monitor is shared with the monitor as video-signal output section. Moreover, although any circuit is sufficient as a network circuit as long as it is accessible, it explains the equipment to a website to access to a website through the telephone line here.

[0073] The optical disk regenerator 1402 reproduces a video signal and an acoustic signal from an optical disk 1401 by the instruction from the information-processing section 1407, and a video signal is supplied to the video-signal switcher 1405, and it supplies an acoustic signal to the loudspeaker 1404 as the decoder 1403 and acoustic signal output section. From the acoustic signal from the acoustic-imaging signal regeneration machine 1402, a decoder 1403 is extracting the sound URL signal corresponding to URL and the couple 1, determines transmitted URL, and supplies the URL to

the information-processing section 1407. A loudspeaker 1404 outputs the acoustic signal supplied from the acoustic-imaging signal regeneration machine 1402.

[0074] The information-processing section 1407 accesses the website which URL supplied from a decoder 1403 shows through the telephone line 1409 along with the procedure defined beforehand, acquires a web information, and supplies a web information to the web information video-signal converter 1410 according to the instruction from the operation key 1408 as an instruction input unit. Or if needed, the information-processing section 1407 writes in the storage section 1411 for URL, or reads URL from the storage section 1411. Or the information-processing section 1407 gives an instruction to the optical disk regeneration section 1402.

[0075] Storage 1411 supplies URL which has memorized or memorized URL supplied from the information-processing section 1407 to the information-processing section 1407. The operation key 1408 as an instruction input means supplies an instruction to the information-processing section 1407. The web information video-signal converter 1410 changes into a video signal the web information supplied from the information-processing section 1407, and supplies it to the video-signal switcher 1405.

[0076] The video-signal switcher 1405 supplies any, one side, or the both sides of a video signal supplied from the video signal or the web information video-signal converter 1410 supplied from the acoustic-imaging signal regeneration machine 1402 to the monitor 1406 as video-signal output section. A monitor 1406 outputs the video signal supplied from the video-signal switcher 1405. The procedure of the information-processing section 1407, i.e., the procedure of the optical disk regenerator by this invention, is the same as that of drawing 11 mentioned above, and it is good.

[0077] Thus, the optical disk regenerative apparatus which has a sound URL signal regeneration function by this invention by combining a means, equipment, and procedure is realizable.

[0078] If the optical disk regenerative apparatus which has the optical disk recording device and the sound URL signal regeneration function to have the sound URL signal record function by this invention mentioned above is used, the sound URL signal record regeneration system by this invention is applicable to an optical disk record regeneration system.

[0079] Now, when the procedure shown in drawing 10 was used and a sound URL signal is extracted, the web information on a website which the URL shows will be displayed irrespective of a request of an user. What is necessary is to memorize the URL among the storage section and just to have the function which there is the instruction from an user, begins and displays a web information, when a sound URL signal is extracted, in order to solve this problem.

[0080] However, it cannot be memorized, when these functions were realized, a certain function which eliminates URL memorized by the storage section could not be found and new URL is acquired. What is necessary is just to have the function which eliminates URL from the storage section, when the fixed time set beforehand passes, after memorizing URL among the storage section, in order to solve this problem.

[0081] Moreover, when these functions are realized, the user is difficult to judge whether URL is memorized or not among the storage section. What is necessary is just to perform an acquisition notice of URL for making an user know the purport to a monitor, while URL is memorized by the storage section, in order to solve this problem. The technique of superimposing the characteristic graphic or characteristic LOGO showing the purport on a picture, and outputting it from a monitor as an example of URL acquisition notice, is mentioned.

[0082] That is, when it sees from an user, "If a web information-display instruction is given to equipment while this URL acquisition notice is performed, a display of the web information on a website which the URL shows is possible" will be said.

[0083] If the fixed time set beforehand passes after memorizing the function and URL which display the information on a website which was mentioned above, and which a display instruction comes and begins from an user and URL shows among the storage section, when URL is memorized by the function which eliminates the URL from the storage section, and the storage section, the procedure which realizes the function perform URL acquisition notice explains with reference to the flow chart of drawing 15 below.

[0084] In step S1501, it judges whether URL was inputted from the decoder. When URL is inputted, a control moves to step S1502, and when URL is not inputted, a control returns to step S1501. That

is, the control has stopped at step S1501 until URL is inputted. In step S1502, inputted URL is written in the storage section and a control progresses to step S1503. In step S1503, URL acquisition notice is performed on a monitor and a control moves to step S1504.

[0085] In step S1504, it judges whether the instruction on which a web information is displayed came. When a web information-display instruction comes, a control moves to step S1505, and when not coming, a control moves to step S1511. In step S1505, URL acquisition notice is ended and a control moves to step S1506. In step S1506, URL is read from the storage section and a control moves to step S1507. In step S1507, the website which URL shows is accessed through the telephone line, a web information is acquired, and a control moves to step S1508.

[0086] In step S1508, an information is displayed on a monitor and a control moves to step S1509. In step S1509, it judges whether the instruction which terminates a display of a web information came. When an instruction of a web information-display end comes, a control moves to step S1510, and when not coming, a control returns to step S1509. That is, the control has stopped at step S1509 until a display end instruction comes. In step S1510, a display of a web information is ended and a control moves to step S1513.

[0087] It judges whether on the other hand in step S1511, the fixed time set beforehand passed. When fixed time passes, a control moves to step S1512, and when not passing, a control returns to step S1504. In step S1512, URL acquisition notice is ended and a control moves to step S1513. In step S1513, memorized URL is eliminated and a control returns from the storage section to step S1501.

[0088] If such procedure is used and the fixed time set beforehand will pass, after memorizing the function and URL which display the information on a website which a display instruction comes and begins to the television receiving set by this invention, or an optical disk regenerative apparatus from an user, and URL shows to it among the storage section, when URL is memorized by the function which eliminates the URL from the storage section, and the storage section, the function of performing URL acquisition notice can realize.

[0089] Namely, when a sound URL signal is extracted from the acoustic signal received or reproduced, while the URL is first memorized to storage If an user gives the display instruction of a web information to equipment while carrying out a fixed time notice of the purport which acquired URL at an user and carrying out URL acquisition notice It displays on a monitor and the URL is eliminated from the storage section with an end of a display of a web information until an user gives a display end instruction for the web information which accessed the website through the telephone line immediately, and was acquired. Moreover, if an user does not give the display instruction of a web information to equipment while URL acquisition notice is carried out, URL acquisition notice is ended and the URL is eliminated from storage \*\*\*\*.

[0090] Now, acquired URL will be lost, if the procedure shown in drawing 15 is used and a display instruction will not be given between fixed time, after extracting a sound URL signal. Therefore, if the user always is not operating equipment, he cannot display the information on a website which acquired URL shows.

[0091] What is necessary is to access the website which selected URL shows and just to have the function which displays a web information by choosing URL desired from URL two or more the URL is remembered to be among the storage section, and the user was remembered to be by the storage section, when a sound URL signal is extracted, in order to solve this problem.

[0092] however, the thing it becomes impossible that much URL will be memorized by the storage section, and it is memorized even if it receives URL newly when these functions are realized -- obvious -- it is . What is necessary is to eliminate URL memorized most early and just to have the function to memorize URL which received newly there, when storage space is lost among the storage section, in order to solve this problem.

[0093] By choosing one URL which an user desires from two or more URL which two or more storage of URL acquired among these storage sections is possible, and was memorized by the storage section such When the function which displays the information on a website which the URL shows, and the space memorized among the storage section are lost URL memorized most early is eliminated and the procedure which gave the function in which URL newly acquired there is memorized is explained with reference to the flow chart of drawing 16 below.

[0094] In step S1601, it judges whether URL was inputted from the decoder. When URL is inputted, a control moves to step S1602, and when URL is not inputted, a control moves to step S1607. In step S1602, it judges whether there is any space memorized among the storage section, if storage is possible, a control will move to step S1604, and if there is no storage space, a control will move to step S1603. In step S1603, URL memorized most early in time is eliminated from the storage section, and a control moves to step S1604.

[0095] In step S1604, inputted URL is memorized among the storage section and a control moves to step S1605. In step S1605, it judges whether URL is memorized by the storage section. When memorizing, a control moves at step S1605, and when not memorizing, a control returns to step S1601. It judges whether the instruction on which the website which inputted URL shows in step S1606 is displayed came, when the instruction on which a website is displayed comes, a control moves to step S1607, and when not coming, a control returns to step S1601.

[0096] In step S1607, URL memorized by the storage section is read, it displays on a monitor that an user should be made to choose, and a control moves to step S1608. In step S1608, it judges whether URL which an user desires was chosen, if it is selection settled, a control will move to step S1609, and if it has not chosen, a control will return to step S1608. That is, the control has stopped at step S1608 until it chooses URL which an user desires.

[0097] In step S1609, the website which URL which the selected user desires shows is accessed through the telephone line, a web information is acquired, and a control moves to step S1610. In step S1610, an information is displayed on a monitor and a control moves to step S1611. In step S1611, when it judges whether the instruction which terminates a display came and a display end instruction comes, a control moves to step S1612, and when not coming, a control returns to step S1611. That is, the control has stopped at step S1611 until a display end instruction comes. In step S1612, an informational display is ended and a control returns to step S1601.

[0098] When used such procedure and the function which displays the information on a website which the URL shows by choosing URL two or more storage is possible among the storage section, and an user wishes acquired URL to it as the television receiving set by this invention or an optical disk regenerative apparatus, and the space which memorizes among the storage section are lost, the URL which memorized early most in time eliminates, and the function that the URL acquired newly there memorizes can realize.

[0099] That is, when a sound URL signal is extracted from the acoustic signal received or reproduced and there is no storage space in the storage section, URL memorized time most early first is eliminated, and the URL is memorized among the storage section. URL first memorized to the monitor if an user gives the display instruction of a web information to equipment is displayed, the website which the URL shows by choosing one URL which an user desires from the URL currently displayed is accessed through the telephone line, a web information is acquired, and the web information is displayed on a monitor until an user gives a display end instruction.

[0100] If fixed time progress is carried out after memorizing URL among the storage section although here explained the solution about processing in case there is no storage space in the storage section in the storage section which can memorize two or more URL and the function which eliminates the URL from the storage section will be given, it cannot be overemphasized that there is an effect which lowers the occurrence frequency of the status that there is no storage space in the storage section.

[0101] Now, in the procedure of the equipment explained until now, each memorized only URL among the storage section, the information-display instruction from an user was accessed through the telephone line at the website which the URL shows from an input, and the web information was displayed. However, by the time it accesses the website which the URL shows after inputting an information-display instruction of an user since a circuit is crowded in many cases, it can imagine easily that such a case has considerable time.

[0102] In order to solve this problem, when a sound URL signal is extracted from the acoustic signal received or reproduced It not only memorizes URL among the storage section, but access the website which the URL shows immediately and it acquires a web information. What is necessary is just to have the function to read and display the web information memorized by the storage section, when the web information is also collectively memorized among the storage section and the display

instruction from an user is inputted.

[0103] The procedure which gave these functions is explained with reference to the flow chart of drawing 17. below. In step S1701, when it judges whether URL was inputted from the decoder and URL is inputted, a control moves to step S1702, and when URL is not inputted, a control returns to step S1701. That is, the control has stopped at step S1701 until URL is inputted. In step S1702, URL acquisition notice is performed on a monitor and a control moves to step S1703.

[0104] In step S1703, the website which URL shows is accessed through the telephone line, a web information is acquired, and a control moves to step S1704. In step S1704, URL and a web information are written in the storage section, and a control moves to step S1705. In step S1705, it judges whether the instruction on which the website which inputted URL shows is displayed came. When a display instruction comes, a control moves to step S1706, and when a display instruction does not come, a control moves to step S1710.

[0105] In step S1706, URL acquisition notice is ended and a control moves to step S1707. In step S1707, a web information is read from the storage section and a control moves to step S1708. In step S1708, a web information is displayed on a monitor and a control moves to step S1709. In step S1709, it judges whether the instruction which terminates a display of a web information came. When a display end instruction comes, a control moves to step S1710, and when a display end instruction does not come, it returns to step S1709. That is, the control has stopped at step S1709 until a display end instruction comes. In step S1710, a display of a web information is ended and a control moves to step S1713.

[0106] It judges whether on the other hand in step S1711, the fixed time set beforehand passed. When fixed time passes, a control moves to step S1712, and when having not passed, a control returns to step S1705. In step S1712, URL acquisition notice is ended and a control moves to step S1713. In step S1713, URL and the web information which had been memorized are eliminated and a control returns from the storage section to step S1701.

[0107] If such procedure is used, to the television receiving set by this invention, or an optical disk regenerative apparatus When a sound URL signal is extracted from the received acoustic signal, it not only memorizes URL among the storage section, but When accessed the website which the URL shows immediately and the web information was acquired, the information is also collectively memorized among the storage section and the display instruction of the web information from an user is inputted, the function to read and display the web information memorized by the storage section can be realized.

[0108] although how to apply record regeneration of a sound URL signal to the optical disk record regeneration system which is a picture acoustic signal record regeneration system was explained to the example in the enforcement gestalt mentioned above, record regeneration of a video signal is not indispensable to record regeneration of a sound URL signal -- obvious -- it is .

[0109] Although the equipment which gave the sound URL signal regeneration function to the optical disk regenerative apparatus as a sound URL signal receiving set in the enforcement gestalt mentioned above has been explained, it cannot be overemphasized that it can realize also as software which is applied to the personal computer having an acoustic signal regenerative function and the function which accesses to a website and displays a web information and which realizes procedure explained so far.

[0110] In the enforcement gestalt mentioned above, although it came, the thing which mentioned as the example using an acoustic signal, i.e., the signal of human being's audible band, as a sound URL signal, and was explained and for which the same effect can be acquired by this invention by every signal if it is the signal which can be transmitted and received as an acoustic signal cannot be overemphasized.

[0111]

[Effect of the invention] If it depends on this invention, since the access to a website will be made easy, the sound URL signal transceiver system which consists of a sound URL signal sending set which transmits URL as an acoustic signal, and a sound URL signal receiving set which accesses the website which extracts URL from the received acoustic signal and the URL shows is realizable.

[0112] Moreover, if it depends on this invention, since the access to a website will be made easy, the sound URL signal record regeneration system which consists of a sound URL signal recording

device which records URL as an acoustic signal, and the sound URL signal regeneration equipment which accesses the website which extracts URL from the reproduced acoustic signal and the URL shows is realizable.

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[Translation done.]